

CLAIMS

1. An ophthalmic composition which comprises
3-hydroxybutyric acid and/or salts thereof as active
5 ingredients and is used to treat tear dysfunction.

2. The composition of claim 1, wherein the
treatment of the tear dysfunction is achieved by an
improvement in the stability of the tear film and/or
10 an improvement in the retention of tears on the
keratoconjunctive.

3. The composition of claim 2, wherein the
improvement in the stability of the tear film is
15 achieved by inhibition of evaporation of tear.

4. The composition of claim 2, wherein the
improvement in the stability of the tear film is
achieved by an improvement in tear film breakup time.
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5. The composition of claim 2, wherein the
improvement in the retention of tears is achieved by
maintaining keratoconjunctive epithelium cells in a
normal state and/or restoring the keratoconjunctive
25 epithelium cells to the normal state.

6. The composition of
claim 2, wherein the improvement in the retention of
tears is achieved by maintaining the
30 microvilli/microvillus of keratoconjunctive
epithelium cells in a normal state and/or restoring the
microvilli/microvillus of the keratoconjunctive
epithelium cells to the normal state.

7. The composition of claim 1, wherein the tear dysfunction is tear dysfunction without injuries on the keratoconjunctive.

5 8. The composition of claim 1, wherein the treatment of the tear dysfunction is inhibition of the occurrences of diseases caused by the tear dysfunction.

10 9. The composition of claim 8, wherein the treatment of the tear dysfunction is inhibition of the occurrences of diseases caused by the tear dysfunction without injuries on the keratoconjunctive.

15 10. The composition of claim 1, wherein the concentration of 3-hydroxybutyric acid and/or salts thereof ranges from 0.8 to 800 mmol/l.

20 11. The composition of claim 1, wherein the concentration of 3-hydroxybutyric acid and/or salts thereof ranges from 10 to 150 mmol/l.

25 12. A method for treating tear dysfunction which comprises applying the composition of any of claims 1 to 11 to a patient having tear dysfunction as eye drops in an amount effective in treating the tear dysfunction.

13. Use of the composition of any of claims 1 to 11 for treating tear dysfunction.

30 14. Use of the composition of any of claims 1 to 11 for treating the tear dysfunction of a patient without injuries on the keratoconjunctive and/or inhibiting the occurrences of diseases caused by the tear dysfunction.